

Work Order ID 166363***166363***

Page 1

Monday, September 18, 2017 8:54:34 AM

Item ID: D212-580-043

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Led Pulse Light

Start Date: 9/18/2017 Start Qty: 3.00

3

Cust Item ID:

Required Date: 9/25/2017 Req'd Qty: 3.00

3

Customer:

Reference:

Approvals:

Process Plan:

DAS

21

Date: SEP 18 2017

Tooling:

Date:

Run Start ***NR1***

QC:

9-89

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
IIN-D212-580-2	D

SEP 18 2017
SD

100

Document Control

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPPD212-580-043 CHG001

3 DAS
27
9-89

SEP 19 2017

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

3

SEP 18 2017

SD DAS
28
9-89

120

QC4- 100% Inspect kits for completeness

0.03

120

QC

Memo

0.09

Quality Control

3 DAS
27
9-89

SEP 19 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER :									

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3

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

Pick Kit

0.00

130

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPD212-580-043
Location: FG0183 DAS
28
9-09

SEP 19 2017

140

QC21- Final Inspection - Work Order Release

0.10

140

QC

Memo

0.30

Quality Control

17/9/20
um 17/9/20

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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OTHER : ☐									

Picklist Print

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Page 1

Work Order ID: 166363

166363

Parent Item: D212-580-043

D212-580-043

Parent Item Name: Led Pulse Light

Start Date: 9/18/2017

Required Date: 9/25/2017

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP REV:A NEW ISSUE 10-05-11 JLM VERIFIED BY:DD IPP
rev:B 10.10.12 AS PER ECN10-618 DD VERF:JLM IPP rev:C
10.11.22 AS PER ECN10-642 DD VERF:JLM IPP rev:D 10.12.16
AS PER ECN10-658 DD VERF:EC IPP rev:E 11.03.31 added
D4377-1 DD VERF:EC IPP REV:F 12.02.24 as per DS19596
rev a DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

1-206062-4

Purchased

No

110

Each

34.0000

4

12

1-206062-4

Contacts, Sockets (P1000)

**

Location

Loc Qty

Loc Code

st574

11

m136295

1

m138165

10

ST576

23

m137475

10

m138354

8

m138428

5

1210/2405-2A

Purchased

No

110

Each

36.0000

1

3

1210/2405-2A

PULSE LIGHT MODULE

**

Location

Loc Qty

Loc Code

mf01

30

m138472

30

ST540

6

154424

1

159121

5

SEP 19 2017

SEP 19 2017

DAS
27
9-89

DAS
27
9-89

DA
21
9-8

DAS
28
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Picklist Print

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Page 2

Work Order ID: 166363

166363

Parent Item: D212-580-043

D212-580-043

Parent Item Name: Led Pulse Light

Start Date: 9/18/2017

Required Date: 9/25/2017

Start Qty: 3.00

Required Qty: 3.00

205838-1

Purchased

No

110

Each

13.0000

1

3

205838-1

CONNECTOR, PLUG (P3)

**

SEP 19 2017

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST576

13

M137113

2

M137475

6

M138428

5

206458-1

Purchased

No

110

Each

10.0000

1

3

206458-1

FEED-THRU-RECEPTACLE (J2/J3)

**

SEP 19 2017

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST567

5

M138353

5

ST576

5

M137370

5

206460-1

Purchased

No

110

Each

7.0000

1

3

206460-1

CONNECTOR, PLUG (P2)

**

SEP 19 2017

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST576

7

M136837

7

206485-1

Purchased

No

110

Each

13.0000

1

3

206485-1

CONNECTOR, PLUG (J1000)

**

SEP 19 2017

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST576

13

M134712

2

M135998

6

M138428

5

Monday, September 18, 2017 8:54:37 AM

Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Misidentified ☐	Past Due ☐																																																																

Picklist Print

Monday, September 18, 2017 8:54:37 AM

Page 3

Work Order ID: 166363

166363

Parent Item: D212-580-043

D212-580-043

Parent Item Name: Led Pulse Light

Start Date: 9/18/2017

Required Date: 9/25/2017

Start Qty: 3.00

Required Qty: 3.00

206486-2 Purchased No

110 Each 10.0000 1 3

206486-2

Connector, Socket (J1000)

**

SEP 19 2017 **DAS 28 9-89**

DAS 27 9-89

Location

Loc Qty

Loc Code

ST576

10

m135998

10

AN3-7A Purchased No

110 Each 171.0000 4 12

AN3-7A

Bolt

**

SEP 19 2017 **DAS 28 9-89**

DAS 27 9-89

Location

Loc Qty

Loc Code

ST349

171

m137164

171

AN4-17A Purchased No

110 Each 49.0000 2 6

AN4-17A

Bolt

**

SEP 19 2017 **DAS 28 9-89**

DAS 27 9-89

Location

Loc Qty

Loc Code

ST343

49

M138230

49

AN525-832R10 Purchased No

110 Each 92.0000 4 12

AN525-832R10

SCREW

**

SEP 19 2017 **DAS 28 9-89**

DAS 27 9-89

Location

Loc Qty

Loc Code

ST328

92

m137088

92

D4078-1 Manufactured No

110 Each 18.0000 2 6

D4078-1

Clamp Half

**

SEP 19 2017 **DAS 28 9-89**

DAS 27 9-89

Location

Loc Qty

Loc Code

ST074

18

158884

18

Monday, September 18, 2017 8:54:37 AM

Shop Packet Print

Page 3

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
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Page 4

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166363

Parent Item: D212-580-043

D212-580-043

Parent Item Name: Led Pulse Light

Start Date: 9/18/2017

Required Date: 9/25/2017

Start Qty: 3.00

Required Qty: 3.00

D4079-1 Manufactured No

110 Each 22.0000 2 6

D4079-1

Clamp Half, Attachment

**

DAS
27
9-89

Location

Loc Qty

Loc Code

ST0744

22

153837

2

158889

20

SEP 19 2017

DAS
28
9-89

D4081-1 Manufactured No

110 Each 19.0000 2 6

D4081-1

Bushing

**

DAS
27
9-89

Location

Loc Qty

Loc Code

ST074

19

156901

19

SEP 19 2017

DAS
28
9-89

D4377-1 Manufactured No

110 Each 6.0000 1 3

D4377-1

Placard

**

DAS
27
9-89

Location

Loc Qty

Loc Code

ST 088

6

160139

6

5/19/2018

SEP 19 2017

DA
28
9-8

EWLA1000DBDS0W Purchased No

110 Each 23.0000 2 6

FWI A1000DBDS0W

LED Light

**

DAS
27
9-89

Location

Loc Qty

Loc Code

ST540

23

156739

3

m138080

10

m138434

10

SEP 19 2017

DAS
28
9-89

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Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
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Picklist Print

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Parent Item: D212-580-043

D212-580-043

Parent Item Name: Led Pulse Light

Start Date: 9/18/2017

Required Date: 9/25/2017

Start Qty: 3.00

Required Qty: 3.00

M39029/63-368

Purchased

No

110

Each

211.0000

30

90

M39029/63-368

CONTACTS, SOCKETS (P1000)

**

SEP 19 2017

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST566

211

M137192

31

M138238

60

M138354

60

M138428

60

31
59

M39029/64-369

Purchased

No

110

Each

89.0000

10

30

M39029/64-369

Connector, Pins (J1000)

**

SEP 19 2017

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST566

89

m136909

1

m137192

28

m138354

30

m138428

30

28
2

MS21042L04

Purchased

No

110

Each

137.0000

4

12

MS21042L04

NUT

**

SEP 19 2017

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST303

137

125653

37

m135766

100

12

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Shop Packet Print

Page 5

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Page 6

Work Order ID: 166363

166363

Parent Item: D212-580-043

D212-580-043

Parent Item Name: Led Pulse Light

Start Date: 9/18/2017

Required Date: 9/25/2017

Start Qty: 3.00

Required Qty: 3.00

MS21042L08

Purchased

No

110

Each

1,250.000

4

12

MS210421 08

Nut

**

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

313

m135978

49

m138333

264

ST303

937

m138333

937

SEP 19 2017

DAS
28
9-89

MS21042L3

Purchased

No

110

Each

1,487.000

7

21

MS210421 3

Nut

**

DAS
27
9-89

Location

Loc Qty

Loc Code

FP001

44

m135945

44

GA

308

m134360

102

M136665

206

OVER007

500

m138408

500

ST303

635

m137495

12

m138230

500

m138326

123

SEP 19 2017

DAS
28
9-89

21

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Page 7

Work Order ID: 166363

166363

Parent Item: D212-580-043

D212-580-043

Parent Item Name: Led Pulse Light

Start Date: 9/18/2017

Required Date: 9/25/2017

Start Qty: 3.00

Required Qty: 3.00

MS21042L4

Purchased

No

110

Each

1,772.000

2

6

MS21042L4

Nut

**

SEP 19 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

FP001

10

m133363

10

OVER007

500

m138230

500

ST303

1262

m138170

500

m138326

762

6

MS22073-3

Purchased

No

110

Each

8.0000

1

3

MS22073-3

CIRCUIT BREAKER

**

SEP 19 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

ST290

8

m136835

2

mm138165

6

2

1

MS24524-21

Purchased

No

110

Each

5.0000

1

3

MS24524-21

SWITCH (ON-OFF-ON)

**

SEP 19 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

ST290

5

m138165

3

m138428

2

3

MS26574-3

Purchased

No

110

Each

4.0000

1

3

MS26574-3

CIRCUIT BREAKER

**

SEP 19 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

ST281

4

m138165

4

3

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DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date: _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

Picklist Print

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Page 8

Work Order ID: 166363

166363

Parent Item: D212-580-043

D212-580-043

Parent Item Name: Led Pulse Light

Start Date: 9/18/2017

Required Date: 9/25/2017

Start Qty: 3.00

Required Qty: 3.00

MS35206-217

Purchased

No

110

Each

856.0000

4

12

MS35206-217

SCREW

DAS
27
9-89

Location

Loc Qty

Loc Code

ST272

856

m133799

856

**

SEP 19 2017

DAS
28
9-89

NAS1149D0363J

Purchased

No

110

Each

1,195.000

8

24

NAS1149D0363.I

Washer

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

408

m137963

408

ST263

787

m138336

787

**

SEP 19 2017

DAS
28
9-89

NAS1149D0463J

Purchased

No

110

Each

1,760.000

4

12

NAS1149D0463.I

Washer

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

447

M135056

40

M137699

407

Return2017

16

M136665

16

ST263

1297

M137988

600

M138230

697

**

SEP 18 2017

DAS
28
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : ☐							

Picklist Print

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Work Order ID: 166363

166363

Parent Item: D212-580-043

D212-580-043

Parent Item Name: Led Pulse Light

Start Date: 9/18/2017

Required Date: 9/25/2017

Start Qty: 3.00

Required Qty: 3.00

NAS1149DN432J

Purchased

No

110

Each

130.0000

8

24

NAS1149DN432.I

WASHER

**

DAS
27
9-89

Location

Loc Qty

Loc Code

ST265

130

m129682

30

m138326

100

24

SEP 18 2017

DAS
28
9-89

NAS1149DN816J

Purchased

No

110

Each

224.0000

8

24

NAS1149DN816.I

WASHER

**

DAS
27
9-89

Location

Loc Qty

Loc Code

ST264

224

m128057

24

m138084

200

17

SEP 18 2017

DAS
28
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

7.0 PARTS LIST

Qty	Part Number	Description
X	D212-580-043	LED Pulse Light Kit
2	EWLA1000DBDS0W	LED Light
2	D4078-1	Clamp Half
2	D4079-1	Clamp Half, Attachment
2	D4081-1	Bushing
1	MS26574-3	Circuit Breaker
1	MS22073-3	Circuit Breaker
1	MS24524-21	Switch (On-Off-On)
1	1210/2405-2A	Pulse Light Module
1	206486-2	Connector, Socket (J1)
1	206485-1	Connector, Plug (P1)
1	206458-1	Feed-thru, Receptacle (J2/J3)
1	206460-1	Connector, Plug (P2)
1	205838-1	Connector, Plug (P3)
10	M39029/64-369	Contacts, Pins (J1)
30	M39029/63-368	Contacts, Sockets (P1/P2/P3)
4	1-206062-4	Connector Backshell
2	AN4-17A	Bolt
4	AN3-7A	Bolt
2	MS21042L4	Nut
7	MS21042L3	Nut
4	NAS1149D0463J	Washer
8	NAS1149D0363J	Washer
4	AN525-832R10	Screw
4	MS21042L08	Nut
8	NAS1149DN816J	Washer
4	MS35206-217	Screw
4	MS21042L04	Nut
8	NAS1149DN432J	Washer
1	D4377-1	Placard

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Revision: D

Date: 12.06.13



Department of Transport

Supplemental Type Certificate

This approval is issued to:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ontario
Canada K6A 1K7

Number: SH92-16

Issue No.: 4

Approval Date: April 29, 1992

Issue Date: September 03, 2010

Responsible Office:

Prairie and Northern

Aircraft/Engine Type or Model:

BELL 204B, 205A-1, 205B, 212, 214B, 214B-1, 412, 412 CF, 412 EP

Canadian Type Certificate or Equivalent:

BELL 205B H-104
BELL 214B, 214B-1 H-80
BELL 212, 412, 412 CF, 412 EP H-86
BELL 204B, 205A-1 H1SW

Description of Type Design Change:

Cargo Mirror and Pulse Light Installation

**Installation/Operating Data,
Required Equipment and Limitations:**

Manufacture of the Cargo Mirror and Pulse Light Kits must be in accordance with Transport Canada approved Dart Aerospace Ltd. Master Document List MDL-D212-580, Revision D, dated 2010-08-13, or later approved revision.

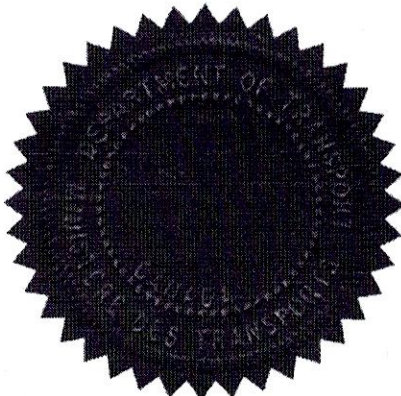
Installation of the Cargo Mirror and Pulse Light Kits must be in accordance with Transport Canada approved Dart Aerospace Ltd. Installation Instructions IIN-D212-580, Revision D, dated 2010-02-08, or later approved revision.

Maintenance of the Cargo Mirror and Pulse Light Kits must be in accordance with Transport Canada accepted Dart Aerospace Ltd. Instructions for Continued Airworthiness ICA-D212-580, Revision 2, dated 2010-07-20, or later Transport Canada accepted revision.

Basis of Certification:

FAR 29, up to and including Amendment 29-51 for affected areas.

- End -



Conditions: This approval is only applicable to the type/model of aeronautical product specified therein. Prior to incorporating this modification, the installer shall establish that the interrelationship between this change and any other modification(s) incorporated **will not** adversely affect the airworthiness of the modified product.


Greg Oucharek
For Minister of Transport

Canada